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10/674,908	09/30/2003	Evon Llewellyn Crooks	030627/267420	9006

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EXAMINER
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LAZORCIK, JASON L

ART UNIT	PAPER NUMBER
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1791

MAIL DATE	DELIVERY MODE
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01/23/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/674,908	<b>Applicant(s)</b> CROOKS ET AL.	
	<b>Examiner</b> JASON L. LAZORCIK	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on November 6, 2008 has been entered.

### ***Status of the Claims***

Applicants Request for Continued Examination dated November 6, 2008 cancels all previously pending claims 1-20 and submits new claims 21-40.

Claims 21-40 are pending for prosecution on the merits

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. **Claims 24 and 40** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter

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which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

4. Independent claim 40 and dependent claim 24 each recite the limitation wherein “the semi-permeable barrier and both sections of filter material are devoid of adsorbent material”. Applicant further alleges in the reply dated November 6, 2008 that support for the instant limitation may be found in figure 3, example 4, and pages 18, 24, and 25 in the originally filed Specification. The cited passages have been carefully reviewed but do not provide supporting basis for the instant limitation which excludes “adsorbent material” from the semi-permeable barrier and both sections of adsorbent material.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 21 and 24-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Counts (5,629,525) in view of Zhuang (US 6,814,786 B1) and Yang (US 2004/0226569 A1) and in further view of Keith et. al. (<http://tobaccodocuments.org/pm/2501260096-0130.html>).**

*(I) Preliminary Note*

7. With respect to the rejection of newly presented independent claims 21 and 40 based upon the primary references to Counts, Zhuang, Yang, and Keith, Applicant is respectfully advised that the combination of references employed in the instant rejection has been previously set forth and exhaustively treated in prior issued Official communications. Specifically, the rationale underpinning which would lead one of ordinary skill to combine the references to Counts, Zhuang, Yang, and Keith in such a manner as to arrive at Applicants recited cigarette structure ( e.g. independent claims 1 and 20 in the claims dated August 31, 2006) have been set forth in detail in the Official Action dated October 4, 2006. This rationale has been extensively debated in Applicants Appeal Brief Dated April 4, 2007 and the Examiners Answer dated October 31, 2007. The Examiners stated position has been affirmed in the BPAI decision dated September 9, 2008.

8. Since the details of the prior art rejection have been made explicit in above noted Official communications and since said references are applied to the pending claims in the identical manner to the currently pending claims, said details are not here repeated. In short, the combination of the prior art references to Counts, Zhuang, Yang, and Keith

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has been previously treated and is not construed to be at issue in the instant rejection of claims.

(II) The prior art references are applied to independent claims 21 and 40 in the same manner as previously set forth in the Official Action dated August 31, 2006

9. Regarding the newly presented independent claims 21 and 40, said claims are held to be substantially equivalent to respective independent claims 1 and 20 as presented in Applicants reply dated August 31, 2008. Therefore, Applicant is advised that the prior art references are applicable in the same manner as in the Official Action dated August 31, 2006.

10. In addition, dependent claims 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, and 39 are construed to be substantially identical in scope to the previously presented claims 3, 5,6,7, 8, 9, 10, 11,12, 13, , 14, 15, 16, 17, and 18, respectively.

Where the noted dependent claims have been previously considered and rejected over the above combined prior art to Counts, Zhuang, Yang and Keith, said the currently pending dependent claims are deemed to rise or fall based upon the patentability of parent claim 21. Again, Applicant is respectfully directed pages 11-14 of the Examiners Answer dated October 31, 2007 for a detailed treatment of the noted dependent claims.

(III) Discussion restricted to newly recited claim limitations

11. Since the new claims are substantially similar in scope to previously treated claims 1 and 20 and for sake of clarity, the discussion of patentability is restricted to the

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claim limitations which distinguish the newly presented independent claims 21 and 40 over the analogous and previously rejected independent claims 1 and 20. The currently pending claims 21 and 40 recite the following limitations not previously considered by the Examiner;

- a. The filter element proximal to the tobacco rod is "abutting the tobacco rod" as recited in line 5 of claim 21 and in line 5 of claim 40.
- b. the first and second sections of filter material are "circumscribed by a plug wrap" and the compartment between the two sections of filter material "defined and bounded" by said filter material and the plug wrap as recited in lines 8-10 of claim 21
- c. the semi permeable barrier comprises a porous paper or a fibrous tow filter as recited in claim 21, lines 13-14
- d. the semi permeable barrier and both sections of filter material are devoid of adsorbent material as recited in claim 40, lines 12-13

(IV) Cigarette structure taught by Counts, Zhuang, Yang and Keith

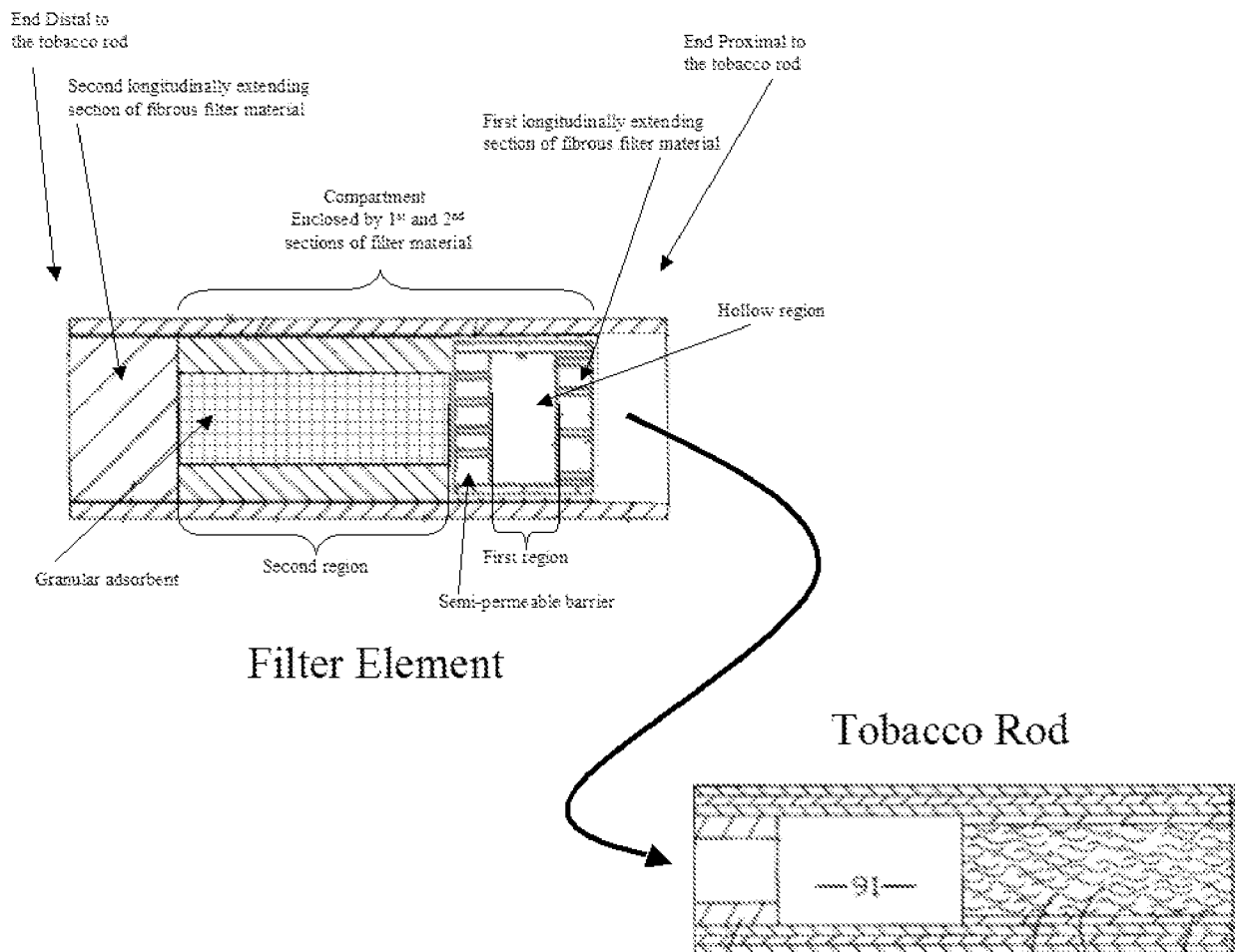
12. Applicant was previously advised of the multicomponent filter structure disclosed by the noted prior art references. Such a cigarette structure was presented in the composite figure displayed on page 8 of the prior issued Official Action dated October 4, 2006 and said figure is reproduced below.

13. With reference to the composite figure, the prior art teaches a cigarette comprising a tobacco rod which the Examiner construes as that portion of the cigarette

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circumscribed by overwrap (71). A first longitudinally extending section of fibrous tow is positioned proximal to and abutting the free flow filter element (71) of the tobacco rod. A second longitudinally extending section of fibrous tow is located at the end of the filter element distal from the tobacco rod. Both first and second sections of fibrous tow are circumscribed by tipping paper (64) or "a plug wrap". As noted in the figure, a compartment is defined by bounding the first and second sections of fibrous tow material with the tipping paper (64). A semi-permeable barrier partitions the compartment into a hollow first region and a second region comprising the Yang adsorbent material. Use of fibrous tow materials in the semi-permeable barrier and the first longitudinally extending section of material (e.g. sorbent segments (32) of the Zhuang filter (30) ) were rendered obvious in view of Keith and the ordinary level skill in the art at the time of the invention.





14.

15. Regarding **limitation (a)** above, the filter element depicted in the composite figure clearly comprises a filter element proximal to the tobacco rod and abutting the tobacco rod" as recited in line 5 of claim 21 and in line 5 of claim 40.

16. Regarding **limitation (b)** above, the above filter element is by circumscribed by tipping paper (64) or "a plug wrap" thereby bounding the first and second sections of fibrous tow material and defining a compartment between said tow materials as recited in lines 8-10 of claim 21

17. Regarding **limitation (c)**, Applicant was previously advised that use of fibrous tow materials in the semi-permeable barrier and the first longitudinally extending section

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of material (e.g. sorbent segments (32) of the Zhuang filter (30) ) were rendered obvious in view of Keith and the ordinary level skill in the art at the time of the invention. As such, a semi-permeable barrier comprising a porous paper or a fibrous tow filter material, as recited in claim 21, lines 13-14, would have represented an obvious extension over the cited prior art for one of ordinary skill in the art

Regarding **limitation (d)** and **Claim 24**, Yang teaches (Pg 6, ¶ [0058]) that the flavored carbon particles can be incorporated in various ways such as by being loaded onto paper or other substrate material which is *fitted into the passageway of the tubular free-flow filter element (102).* Where the prior art teaches an embodiment wherein the Yang adsorbent fitted into the passageway of the tubular free-flow filter (101), both sections of filter material and the semi-permeable barrier would reasonably viewed as being devoid of the Yang adsorbent material.

That is, the instant limitation is not construed to require that the tow sections and the barrier are devoid of all adsorbent materials, only that said sections are devoid of an “adsorbent material” (e.g. the Yang adsorbent material). In an even broader construction of the claim, the tow sections and barrier may be devoid of any adsorbent materials which are nowhere employed in the disclosed construction of the cigarette (e.g. silica gels, asbestos fibers, etc.).

Regarding dependent claims **25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, and 39**, said claims are construed to be substantially identical in scope to the claims

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3, 5,6,7, 8, 9, 10, 11,12, 13, , 14, 15, 16, 17, and 18 as respectively set forth in Applicants reply dated August 31, 2006. Applicant is advised that the prior art references to Counts, Yang, Zhuang, and Keith are applied in the same manner as in the Official Action dated August 31, 2006.

**Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Counts (5,629,525), Zhuang (US 6,814,786 B1), Yang (US 2004/0226569 A1) and Keith et. al. (<http://tobaccodocuments.org/pm/2501260096-0130.html>) as applied to parent claim 21 above and in further view of Jesup et. al. (US 4,564,030)**

*(IV) Counts, Zhuang, Yang and Keith are silent regarding perforations in the plug wrap overlying the compartment*

The cited prior art references explicitly teach or render obvious every element of Applicants claimed cigarette as recited in parent claim 21. Using the convention introduced in prior Official Actions, the filter set forth by the above noted references is hereafter referred to as the Modified Counts Filter (MCF). The references are however silent regarding the presence of perforations in the plug wrap as recited in claim 22 or that said perforations should be positioned overlying the compartment as recited in claim 23.

*(V) The claimed perforation structure would have been obvious in view of the reference to Jessup*

Jessup teaches a multi-component filter structure comprising a hollow mixing chamber which is similar to the structure of the above cited prior art references Counts, Zhuang, Yang, and Keith. With particular reference to the instant reference figure 1, Jessup teaches that perforations (28) are preferably provided in the plug wrap materials (18, 20) in a region overlapping a hollow compartment (24) of the filter element.

Jessup explicitly states that it is well known in the art to provide such plug wrap perforations in order to dilute main stream smoke to achieve a desired taste (col. 1, lines 18-27). The reference further notes that provision of these perforations in an overlying arrangement with a mixing compartment "ensures that the smoke mainstream and the diluting air stream are allowed to commingle freely ... prior to the mixture entering the smoker's mouth"

In view Jessup reference, it would have been obvious for one of ordinary skill in the art to further modify the MCF filter to provide perforations in the plug wrap at a position overlying the compartment. Such a modification would have been obvious to one of ordinary skill in the art seeking to achieve a desired smoke taste by diluting the mainstream smoke with external air through plug wrap perforations in the manner which is recognized as conventional by Jessup. Placement of these perforations in overlying relationship to the mixing zone would have presented an obvious method to ensure that the diluent air is properly mixed before entering the smoker's mouth as noted by Jessup.

### ***Response to Arguments***

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18. Applicant's arguments with respect to claims 21-40 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON L. LAZORCIK whose telephone number is (571)272-2217. The examiner can normally be reached on Monday through Friday 8:30 am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason L Lazorcik/  
Examiner, Art Unit 1791

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